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XXXVIII.—*Notes on the Coleopterous Family Dermestidæ, and Descriptions of some new Forms in the British Museum.* By GILBERT J. ARROW.

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THE catalogue of this family of beetles compiled by Dalla Torre and published in 1911, while of the greatest value as an indispensable preliminary to the systematic study of the group, is necessarily uncritical and in many respects defective from the fact that the compiler has no intimate knowledge of the insects with which it deals. While studying and arranging with its help the British Museum collection of Dermestidæ, I have recorded for the information of future workers the various corrections and omissions which have come under my notice; and these are published here, together with descriptions of some of the new species in the collection which appeared specially worthy of receiving names.

With an extraordinary degree of variability in the formation of the antennæ, and, to a less extent, in other points of structure, these insects have a general similarity which rarely leaves any doubt as to their belonging to the family. The most important and distinctive feature is the existence of a frontal ocellus, which is absent in the genus *Dermestes* only. This interesting feature is only known in one other family of Coleoptera—the Staphylinidæ (subfamily Omaliinæ),—for the statements that it is found in the genera *Pteroloma* and *Hylecatus* are quite erroneous.

Genus DERMESTES.

The types of various so-called species in the British Museum and the Oxford University Museum have never hitherto received any critical examination. That of *D. roei*, Hope, is unfortunately not to be found at Oxford, but of the other two described by Hope I have ascertained that *D. elongatus* belongs to *vulpinus*, F., and *D. pollinctus* to *frischii*, Hugel.

D. elongatus, Lec., is not, as suggested by Jayne, the same as the European *D. bicolor*, F., a much shorter insect. As Leconte's name was preoccupied by Hope, I propose to call the species

Dermestes nidum (nom. nov.),

Mr. H. S. Barber having recorded (Proc. Biol. Soc. Washington, xxvii. 1914, p. 146) the fact that it breeds in the nests of a heron.

D. felinus, F., of which the type is in the British Museum, is *Dermestes cadaverinus*, as is also *D. subcostatus*, Murray. *D. tessellatus*, F., although it has not yet been eliminated from the catalogues, was found long ago to be an *Anchium* (*rufovillosum*, Deg.).

The North-American *D. dissector*, Kirby, belongs to the European species *D. undulatus*, Brahm, and the Central-American specimens referred by Sharp in the 'Biologia Centrali-Americana' to *D. mannerheimi* are in reality *D. caninus*, Germ., of which we have specimens also from Panama, Cuba, and St. Domingo.

Genus ATTAGENUS.

Many Dermestidæ, as is well known, have an exceedingly wide area of distribution, and are at the same time extraordinarily variable in their more superficial features. The synonymy due to this fact has by no means all been recorded yet. One of these cosmopolitan species is that named *Æthriostoma undulata* by Motschulsky. This proves to be the same as the Australian *Brachysphyrus irroratus* of Blackburn, the type of which (now in the British Museum) is a female. Blackburn's names must both disappear accordingly. Another synonym for the same insect is *Attagenus rufipes*, Walker. The name *Æthriostoma* is also redundant, for it cannot be distinguished generically from the species of *Telopes*, which is at present treated as a subgenus of *Attagenus*. *A. undulatus* is evidently a common insect; I have seen specimens from Ceylon, India, Singapore, Hongkong,

Philippine Is., Malagascar, Mauritius, etc. Mr. E. E. Green has found it buzzing round the trunks of *Spondias magnifera* trees in Ceylon.

A. gloriosa, F., is not very nearly related to the last species, as Motschulsky has stated. *A. plebejus*, Sharp, is synonymous with *gloriosa*.

A. cylindricus, Kirby, by an oversight has been catalogued by Dalla Torre as a synonym of *A. piccus*, as well as in its right place in *Perimegitoma*.

Similarly, *Anthrenus exilis*, Muls., has got into the Catalogue amongst the species of *Attagenus*, as well as in its proper place.

A. latus, Péring., is *A. hottentottus*, Guér.

A. cyphonoides, Reitter, according to specimens named by him in our collection, has a produced prosternum, and must be transferred to the genus *Trogoderma*.

Attagenus japonicus, Reitt., was compared by its author to *A. marginicollis*, and distinguished only by an almost intangible colour-difference. *A. marginicollis* and other forms hitherto separated from it have since been sunk by Reitter hims lf in his 'Catalogue of the European Coleoptera' as synonymous with the wide-ranging *A. piccus*, Oliv. No reason remains, therefore, for retaining *A. japonicus* as more than a race of that insect.

The following new species belong to this genus:—

Attagenus pardus, sp. n.

Niger, pedibus rufis, corpore supra et subtus dense flavo-cinereo-pubescenti, singuli elytri maculis tribus (aliaque communi media) magnis subcircularibus denudatis, maculis posticis duabus conjunctis, apicalibus, majoribus, medio cinereo-pupillatis; corpore oblongo-ovuli, valde convexo.

Long. 3.5–4.5 mm.; lat. 2–2.5 mm.

Hab. RHODESIA: Salisbury (*G. A. K. Marshall*).

This very distinctively marked species is entirely covered with greyish-yellow hair, with the exception of seven nearly round areas upon the elytra, which are quite black, bare or clothed with much finer pubescence than the rest of the upper surface. One of these patches is placed at the middle of the elytral suture and the others are arranged in a circle round it, one behind the scutellum on each side, one at the outer margin and one occupying the sutural angle, the last larger than the rest and having a central spot of grey pubescence.

It is a convex insect of elongate-oval shape. The club of

the antenna is three-jointed and short, the terminal joint not longer than it is broad. It is an allied species to *A. jucundus*, Péring., but more compact and convex, more closely pubescent, without markings on the pronotum and with quite peculiar detached round spots on the elytra.

Attagenus nigripennis, sp. n.

Niger, pedibus et antennis rufescentibus, harum clava nigra, pronoto, corpore subtus pedibusque fulvo-vestitis, elytris minutius et haud perspicue pubescentibus; ovalis, modice elongatus, dense, fortiter et distincte punctatus, pronoto postice valde lobato, antennarum clava modice elongata, articulo ultimo fœmine parvo, maris longitudine ad duos præcedentes æquali.
Long. 3-3.5 mm.

Hab. GOLD COAST: Aburi.

A specimen of each sex was taken by Mr. W. H. Patterson. The common *Attagenus piceus*, Oliv., is found in Europe, Asia, and America, but has not so far been brought from any part of Africa. The new species closely resembles it, but the puncturation of the upper surface is rather stronger and more distinct, and the hairs clothing the pronotum are long and bright yellow in colour. The basal lobe of the pronotum is much more produced, and the club of the antenna is black in both sexes (it is red in the female of *A. piceus*) and has a much shorter terminal joint in the male. In the female the last joint is smaller than either of the two preceding it.

Attagenus birmanicus, sp. n.

Niger, sed flavo-pubescent, pedibus antennisque rufis; elongato-ovalis, parum convexus, antennarum clava triarticulata, articulis subæqualibus, maris laxius connexis.
Long. 2-3.5 mm.

Hab. UPPER BURMA (*Gray*); Tharrawaddy (*G. Q. Corbett*).

Presented by Mr. H. E. Andrewes.

This closely resembles the widely distributed *A. piceus*, Oliv., but is smaller on the whole, and the hair with which it is clothed is pale yellow both above and beneath. The posterior lobe of the pronotum is much stronger and the scutellum therefore less exposed. The club of the antenna is quite different, the three joints composing it being nearly equal in both sexes and much more loosely articulated in the male, in which the two basal ones are a little longer than

wide and the last not quite twice as long as wide. In the female the basal joint is as long as wide, the middle one transverse, and the last half as long again as it is wide. The male is much smaller than the female.

Genus TROGODERMA.

Trogoderma inclusum, Lec., is apparently the common European *T. versicolor*, Creutz., a cosmopolitan insect, although not recognized as such in the catalogues. It is evidently carried about by commerce, specimens in the British Museum having been found in rice and wheat in India.

The descriptions of *Trogoderma (Eurhophalus) rubiginosus* and *variegatus* of Solier (Gay's 'Historia di Chile,' iv. p. 373) are transposed, as comparison with the figures shows.

T. variipes, Blackb. (T. R. Soc. S. Austr. xii. 1892, p. 208), is omitted from the catalogue. The name *variipes*, Casey, is a duplicate, and that of

Trogoderma caseyi (nom. nov.)

may be substituted for it.

Trogoderma consors, sp. n.

Atrium, antennis pedibus elytrorumque apicibus rufescentibus, elongato-ovalo, undique æqualiter griseo-pubescentibus, pronoto fortiter annulato-punctato, subnitido, basi medio breviter et lato lobato, utrinque oblique sulcato; scutello sat magno; elytris dense granuloso-rugosis, apicibus separatim rotundatis, antennarum clava 5-articulata, serrata.

Long. 3-3.5 mm.

Hab. N.W. AUSTRALIA: Bathurst I.

The extremities of the elytra are separately rounded, as in *T. occidentale*, Blackb., but it is more elongate, less densely granulated and opaque, the pronotum less pointed behind, and the visible scutellum larger. It more resembles *T. cyrense*, Blackb., but the apices of the elytra are not rounded in that species and the club of the antenna is narrower. The oblique grooves extending from each side of the base of the pronotum are scarcely visible in either of Blackburn's species.

Trogoderma pectinifer, sp. n.

Nigrum, opacum, undique griseo-setosum, pedibus, elytrorum apicibus, antennisque rufis; ovatum, modice convexum, capite pronotoque densissime punctato-rugosis, hoc valde convexo, lateribus

regulariter arcuatis, paulo explanatis, basi fortiter et angulatum lobato; elytris grosse et crebre granulatis, apice separatim rotundatis; antennis (σ) longe pectinatis.

Long. 4.5 mm.

Hab. NEW S. WALES: Baan Baa (*G. E. Bryant*, Oct. 1908).

A unique example presented to the Museum by Mr. Bryant.

As in the species last described, the elytra are rounded at the end and do not quite cover the abdomen, but they are more uniformly granulated and opaque, and only the extremities are red. The pronotum also is much more densely sculptured than in *T. consors*, and its posterior lobe is more pointed. The antennæ of the male (the female is unknown) are strongly pectinated, the basal joint alone being bead-like and black, the succeeding joints red and more or less produced, and the terminal one flat and oval.

Trogoderma frater, sp. n.

Nigrum, sat nitidum, tarsis antennarumque stipite rufis; ovatum, parum convexum, crecte setosum, pronoti medio minutissime punctulato, nitidissimo, lateribus punctato-rugosis, elytris fortiter punctatis et rugulosis, haud abbreviatis; antennarum clava (σ) serrata, sex-articulata.

Long. 3.5 mm.

Hab. NEW S. WALES: Illawarra (*G. E. Bryant*); Victoria (*Edwards*).

This is closely similar to *T. difficile*, Blackb., but the pronotum is much more finely and scantily punctured in the middle, and the posterior lobe is broader and more regularly rounded. The antennæ are quite different to those of Blackburn's type, but the latter is probably a female, not a male as Blackburn believed. In *T. frater* the first two joints are globular and dark-coloured, the next three very small, short, and red, the sixth red and a little produced anteriorly, the remaining five large and dark, the seventh to tenth strongly produced. The whole upper surface of the body is clothed with stiff setæ and rather rugulose except in the middle of the pronotum, which is very shining. Blackburn has described the setæ as black and grey in *T. difficile*, but I believe this is an illusion, the apparent colour changing according to the incidence of the light.

Trogoderma tricolor, sp. n.

Ovale, parum elongatum, nigrum, vix nitidum, elytrorum apicibus late rufis; crebre punctatum, minute griseo-setosum, pronoti lateribus et lobo postico elytrorumque fasciis tribus, plerumque late interruptis, albo-squamosis, pedibus antennisque rufis, illis longis, his sat brevibus, clava triarticulata, ovali, articulis duobus penultimis brevissimis.

Long. 3 mm.

Hab. ARABIA: Yemen (*Millingen*).

This interesting species is very different from any other known to me. The white spots are composed of long pointed scales, not fitted together edge to edge as in *Anthrenus*, but free at the end and massed in thick loose clusters. The legs are long and not capable of being closely folded up as in that genus, and although there are cavities in the episterna for the reception of the antennæ they are not very sharply defined and coincident with the antennæ. The club of the latter is broadly oval and flat, consisting of three transverse joints, the last of which is not quite twice as long as the other two, which are very short. In a series of seven specimens, which I believe to include both sexes, I can see no perceptible difference in the antennæ.

Trogoderma ecimium, sp. n.

Oblongo-ovale, nigrum, sat crebre et æqualiter (elytris paulo fortius) punctatum, ubique griseo-pubescent, vix nitidum, elytris macula post-humerali aliaque apicali utrinque ornatis: corpore supra etiam maculis 11 albo-setosis (pronoti duabus lateralibus unaque basali, elytrorum 4 antemedianis et 4 postmedianis transversim positis); pedibus antennarumque stipite rufis, harum clava (♂) elongata, 3-articulata, articulo ultimo ad duos præcedentes longitudine fere æquali.

Long. 3 mm.

Hab. RHODESIA: Salisbury, Umtali.

Three specimens were taken by Mr. G. A. K. Marshall and presented by him to the British Museum.

The species resembles *T. tricolor*, but it is larger and more oblong in shape, and the white spots, of which there are only two ranges instead of three upon the elytra, are formed of fine hairs, and not of scales. There are also two conspicuous red patches upon each elytron, the first transverse and placed behind the shoulder, the other nearly round and occupying

the apical angle, not quite reaching the margins. The antenna is short, but the club is relatively large (about two and a half times as long as it is wide), with the first two joints transverse and the last rather longer than it is wide. The legs are slender and the front tibiæ very spinose externally.

Trogoderma rufopictum, sp. n.

Oblongo-ovale, nigrum, æqualiter haud dense punctatum et sat longe brunneo-setosum, paulo nitidum, elytris macula humerali obliqua, ab marginem externam fore ad suturam extensa aliaque anteapicali integra fere recta ornatis, abdomine, pedibus antennisque rufis, his longis, gracilibus, clava 5-articulata, monilata, articulo ultimo quam præcedenti duplo longiori.

Long. 3 mm.

Hab. NATAL: Frere.

Three specimens found in flowers by Mr. G. A. K. Marshall have been presented by him to the British Museum.

T. rufopictum is similar in size, shape, and general appearance to *T. eximium*, but is without the pattern formed of clustered white hairs. The clothing is uniform, rather long, but not close. The hairs are reddish upon the red elytral patches and darker elsewhere. The antennæ are very different from those of the preceding species, being entirely red, slender, and loosely articulated. The joints composing the club are of a different texture to the rest, but little differentiated in size, although gradually enlarging towards the extremity.

Trogoderma nitens, sp. n.

Nigrum, elytris pone humeros late et recte rufo-fasciatis, fascia ad suturam breviter interrupta, apicibusque rufis; sat late ovale, supra nitidum, sparsim erecte setosum, capite grosse et rugose punctato, pronoto parce, lateribus autem crebre et rugose, punctato, postice haud fortiter lobato, utrinque profunde oblique impresso; elytris undique parce punctatis; antennarum clava 6-articulata, paulo serrata, parte basali et tarsis rufis.

Long. 3 mm.

Hab. S. BRAZIL: Sta. Catharina.

This appears to have the same coloration as *T. pectinicornis*, Reitt., but it is smaller and, instead of being densely punctured, is unusually smooth and shining, with only a very scanty sprinkling of punctures and fine setæ upon the pronotum and elytra. It is oval, not long, and black, with a large bright orange-red patch behind each shoulder, reaching

the lateral margin but not quite extending to the suture, and another nearly round terminal patch leaving only the extreme apex black.

Genus PSACUS.

This genus, formed by Pascoe for an Australian insect and placed by him in the Rhipicerida, in reality belongs to the Dermestidae, being a highly developed form related to *Trogoderma*. The antennæ, in the male especially, have attained an extraordinary development, and the sides of the prothorax in that sex are much dilated, to form a large cavity beneath for the reception of the great fan-like club. This and the large size of the female give the two sexes a strikingly different aspect. The possession of a frontal ocellus, overlooked by Pascoe, and many other features leave no doubt as to the true affinities of the insect. *Trogoderma serriger*, Sharp, from New Zealand, is a nearly related species.

Genus CTESIAS.

The name *Tiresias* was substituted for *Ctesias* by Newman, on the ground that the latter name had been previously used by Hübner; but Hübner's genus is *Chesias*, so that *Tiresias* is redundant.

The South-African species here described has little superficial resemblance to the only hitherto known species, *C. serra*, F., but the form of the antenna, the only really distinctive feature of the genus, is practically identical, and, as there seems to be no structural difference of any importance, I put the two insects together. If, as is possible, the identity in the structure of the antennæ is only the result of parallel development, then the genus *Ctesias* ceases to have any justification, and both insects must be regarded as only aberrant species of *Trogoderma*.

Ctesias variegata, sp. n.

Nigra, elytris hic illic obscure rufo-variegatis, corpore subtus ubique, supra maculatum, albido-setoso; late ovata, crebre punctata, oculis magnis, prope antennas profunde emarginatis, pronoto lato, postice fortiter lobato, lobo rotundato; elytrorum apicibus separatim rotundatis; antennis tarsisque rufis, harum clava magna, 3-articulata, articulis antice valde lobatis, funiculo brevissimo.
Long. 3.5 mm.

Hab. RHODISIA. Salisbury.

A single male specimen was found by Mr. G. A. K. Marshall.

It is broadly oval, strongly punctured, opaque, and pubescent. Its upper surface is sprinkled with white spots, formed of clusters of white decumbent setæ, situated at the margins of the pronotum, upon the posterior lobe, the basal margin of the elytra, three other transverse ranges, and the apical angles. The antenna of the male scarcely differs from that of *C. serra*, except that the last joint is more deeply emarginate at the end, becoming slightly bilobed.

Genus THAUMAGLOSSA.

Anthrenus oralis, Fleut., is evidently the common *Thaumaglossa rufocapillata*, Redt.

Thaumaglossa rufocincta, sp. n.

Nigra, antennis, pedibus, abdomine, fasciaque elytrorum lata, medio nonnunquam interrupta, extus dilatata et ad humeros producta, rufis; corpore supra et subtus sat æqualiter pubescenti, capitis et prothoracis pilis flavis, fasciæ rufescentibus; pronoto haud lato, subtiliter sat parce punctato, elytris fortius et densius.

Long. 3-4 mm.

Hab. RHODESIA: Salisbury.

Both sexes were taken by Mr. G. A. K. Marshall, by whom they have been presented to the British Museum. They were found flying in the sun and also beaten out of a tree (*Zizyphus*).

It is a very distinct species, with a transverse red band upon the elytra, such as reappears so frequently in the different genera of Dermestidæ. This band broadens from the suture to the sides, where it reaches the shoulders, the front margin being oblique, while the hind margin is almost straight. The upper surface of the body is less closely punctured than it is in the common *T. rufocapillata*, and the shape is less broad. The large terminal joint of the antenna of the male is shorter, being little longer from base to apex than its width at the base, and the eight joints forming the foot stalk are very short, the last four gradually dilating to the point of attachment beneath the club. In the female the last joint is nearly spherical, the three preceding ones progressively enlarged, and the penultimate rather rectangular.

Thaumaglossa oothecobia, sp. n.

Nigra, pygidio, vel abdomine toto, antennis, tarsi elytrorumquo

fascia transversa, extus haud vel parum dilatata, horum apicibus etiam nonnunquam, rufis; capite, pronoto elytrorumque basi sat longe et dense griseo-setosis.

Long. 2.5-3 mm.

Hab. S. NIGERIA: Ibadan.

About fifty specimens of this insect, now distributed between the British Museum and the Hope Collection at Oxford, were bred by Dr. W. A. Lamborn from the egg-cluster of a *Mantis*, emerging from it at various dates in July 1913.

It greatly resembles *T. rufocincta*, but is a little smaller, with relatively wider prothorax, rather more abruptly truncated scutellum and distinctly shorter elytra. The median red band does not noticeably dilate towards the sides, but is of approximately equal width throughout. The longer and paler hairs of the head and pronotum extend also to the base of the elytra, where they form a conspicuous transverse band. In a few specimens more or less large red patches occur upon the apices of the elytra, and these may even become united with the median band. The club of the antenna of the male is practically the same as in *T. rufocincta*.

Thaumaglossa lata, sp. n.

Nigra, antennis, pedibus, abdomine, elytrorumque fascia lata transversa, rufis; corpore supra et subtus sat æqualiter pubescenti, capitis et prothoracis capillis flavis, fasciæ rufescentibus; pronoto haud lato, cum elytris fortiter confertim punctatis, lateribus densius, lobo postico valido, truncato.

Long. 3 mm.

Hab. S. CHINA: Hongkong.

A single specimen was taken by Commander J. J. Walker in 1892. It is a female, with the circular terminal joint of the antenna larger than in the same sex of either of the two preceding species. The coloration is the same, but the median red band is narrowed at the outer edge. The elytra are strongly and closely punctured, the disc of the pronotum strongly but less closely, and the sides very densely. The posterior lobe is broadly truncated at the end.

Thaumaglossa sex-maculata, sp. n.

Nigra, antennis, pedibusque flavidis, maculisque elytrorum sex late flavis, subæqualibus, duo utrinque ante medium transverse positae unaque post medium; late ovata, sat dense pallido-pubescenti, pronoto minime sat crebre, elytris fere rugose punctatis, his postice separatim rotundatis; antennarum articulo ultimo (maris) magno, brevissime cordiformi.

Long. 2 mm.

Hab. RHODESIA : Umtali.

A single male was found by Mr. G. A. K. Marshall in October 1897.

It is a minute species, showing an approximation to the genus *Orphinus*. It is rather broadly oval, with close, nearly erect pubescence. Each elytron has three large bright yellow spots, one at the outer edge behind the shoulder, one transversely in line with it near the suture, and the third exactly in line with the second towards the apex. The last joint of the antenna (in the male) is extremely short and very feebly pointed at the end.

Thaumaglossa ovalis, sp. n.

Nigra, antennis, pedibus abdomineque pallide flavis; sat dense griseo-hirta, elytrorum fascia antica, intra-humerali, maculaque utrinque rotundata, postica, fere denudatis; corpore regulariter ovato, convexo, sat nitido, subtiliter punctato, elytris haud abbreviatis, postice attenuatis, abdomen toto obtegentibus.

Long. 2-2.5 mm.

Hab. CHINA (*J. Bowring*).

This species differs entirely from all the others in its regularly oval convex shape and tapering elytra, which completely cover the abdomen. It is lightly punctured and rather shining, with grey pubescence, which leaves bare a transverse strip at the shoulders and a round posterior patch on each elytron. The terminal joint of the antenna in the male is about three times as long as its greatest width.

Thaumaglossa nitidula, sp. n.

Rufo-brunnea, paulo nitida, setis oblique erectis, flavidis et fuscis, subseriatim ordinatis, sat parce vestita; late oralis, ubique minute haud dense punctata; pronoto lato, postice lobato et truncato; elytris haud abbreviatis, apicibus minute rotundatis.

Long. 2.5 mm.

Hab. MALAY PENINSULA : Perak. SIAM : Renong.

A male specimen was found in each of the above-mentioned localities by Doherty.

No other species of the genus can be compared with this, which is peculiar in its lightly punctured shining surface and the uniformly scattered erect setæ upon its upper surface. It is small and rather broadly oval in shape and red-brown in colour. The posterior lobe of the pronotum is truncated, and the extremities of the elytra are very minutely rounded and practically cover the abdomen. The terminal joint of the

antenna of the male is short and heart-shaped, a little more pointed than in *T. rufocincta* and *oethecobia*, but less so than in *T. rufocapillata* and *hilleri*.

Genus ORPHINUS.

The genus *Orphinus* of Motschul-ky, quite wrongly placed with *Orphinus* in Dalla Torre's Catalogue, is really a large and important one, of which a number of species have been described under the name of *Cryptorrhopalum*, while many more remain undescribed. Reitter has stated that the typical species, *O. hamorrhoidalis*, Motsch., belongs to *Cryptorrhopalum*, and has changed its name to *C. motschulskyi*; but in 1908 (Bull. Soc. Ent. Egypte, i. p. 45) he described a so-called new genus (*Ethriosia*), the characters of which are precisely those of *Orphinus*. He placed in it only a single species (*globulicornis*) from Egypt, and omitted to note that many others, including several previously described by himself, are congeneric with it. As already stated by Sharp (Biol. Centr.-Amer., Coleopt. ii. 1, p. 652), *Cryptorrhopalum* is really a well-marked American genus, and the various Oriental and Australian insects which have been referred to it have none of them its essential feature, viz., an antennal club composed of two large, nearly equal joints. The chief diagnostic character of *Orphinus*, as given by Motschulsky, is a "club composed of two very unequal joints, the last circular." The statement that the antenna is 9-jointed is probably due to Mot-chul-ky wrongly counting the minute joints preceding the club, as the number is eleven in the species known to me. The last joint is flat and circular, very large in the male, with the preceding joint relatively small and connate with it. In the female the penultimate joint is larger and the last smaller. In some, if not all, of the species the last ventral segment is broadly depressed in the male and the hind margin produced into a sharp spine on each side of the depression. The mesosternum is broad and completely divided by a channel, which receives the spinose prosternal process.

Sharp and Blackburn did not know the genus *Orphinus*, or they would certainly have placed in it the Old-World insects they have provisionally called *Cryptorrhopalum*. Until other genera are created, it will probably be most natural to transfer to it all the non-American insects now unnaturally associated with *Cryptorrhopalum*. The following may be regarded as typical species of *Orphinus*:—*O. hamorrhoidalis* and *pedestris*, Motsch., *Trogoderma defectum*, Walker,

Aethriosia globulicornis, Reitt., and *Cryptorrhopalum affine*, Reitt., *biflexum*, Reitt., *terminale*, Sharp, *brevicorne*, Sharp, *australicum*, Blackb., *quornense*, Blackb., and *woodvillense*, Blackb. A comparison of Blackburn's types and a series of other specimens has led me to the conclusion that *Cryptorrhopalum eucalypti*, Blackb., is only a rather pale specimen of the last species, *Orphinus woodvillensis*.

A few new species are added here :—

Orphinus æthiops, sp. n.

Niger, antennis pedibusque flavis, ubique parce punctatus et pallide pubescens, punctis minutis; ovatus, parum convexus, oculis magnis, grosse granulatis, antennarum articulo ultimo (maris) magno, discoidali; pronoto lato, brevi, lateraliter bene marginato, postico valde et late lobato; elytrorum apicibus minute rotundatis.

Long. 2.3 mm.

Hab. ANGOLA: Forest Country, 1000–2000 ft. alt. (*Dr. Welwitsch*). MAURITIUS (*J. E. M. Brown*).

There are two specimens in our collection from Angola and a good series from Mauritius. Unless in one case they have been accidentally introduced, the species must be supposed to have a very wide distribution.

It is uniformly black, with pale legs and antennæ and a thin and evenly distributed clothing of greyish hairs above and beneath. The upper surface is rather shining, the punctures being minute and scattered. The eyes are large, prominent, and coarsely faceted, and separated by a distance less than twice their diameter. The pronotum is short, little narrowed in front, and sharply margined at the sides, with a strong, broadly rounded, posterior lobe. The last joint of the antenna of the male is flat, circular, and very large.

Orphinus japonicus, sp. n.

Niger, sat nitidus, parce griseo-setosus, macula rufa utrinque obliqua post humeros sita, antennis pedibusque læte rufis; ovatus, modice convexus, capite pronotoque lævibus, parum setosis, hujus marginibus lateralibus prominentibus paulo explanatis, lobo postico late rotundato, utrinque oblique impresso; elytris crebre punctatis, breviter æqualiter setosis.

Long. 2.5 mm.

Hab. JAPAN: Fukushima, Shinkano (*G. Lewis*, July 1881);

Mimasaka (*J. E. A. Lewis*, July 1913). The Museum contains a specimen from each locality, two of them males.

It is black and shining, with the legs and antennæ yellow, and a bright red oblique patch upon each elytron behind the shoulder. It is rather broadly oval in shape, the pronotum rather smooth and shining, broadly lobed behind, with the lateral margins, especially in the male, slightly flattened and the elytra finely and closely punctured, with fine and even, but not close, pubescence. The last joint of the antenna of the male is very large and circular, that of the female similar but less than half the diameter.

Orphinus jucundus, sp. n.

Niger, profunde, modice crebre, punctatus, sat longe et æqualiter flavo-pubescentis, antennis pedibusque rufescentibus, subnitidus, elytrorum macula transversa antemediana, ad suturam vix attingenti, apicibusque lato rufis; oblongo-ovalis, prothorace transverso, lobo brevi, lato, rotundato.

Long. 2-2.75 mm.

Hab. BOMBAY: Belgaum.

A series was collected by Mr. H. E. Andrewes, who found large quantities by sweeping grass just after the rains (November and December). It was also found in March and April. The species was also taken in Bombay many years ago by the late Dr. Leith. It occurred in Belgaum in company with *O. biflexus*, Reitt. It is larger, more oblong, and less convex than that species, the thoracic lobe is shorter and less pointed, the punctures of the pronotum and elytra larger and more distinct, and the pubescence of the former darker. The anterior red band of the elytra is interrupted at the suture and not continuous as in *O. biflexus*. The terminal joint of the antenna of the male is very large and nearly circular, but slightly pointed at the end, and the penultimate joint is small. The last ventral segment in the same sex is broadly depressed and the hind margin bears a sharp spine on each side of the depression.

Orphinus nilgirensis, sp. n.

Niger, ovatus, valde convexus, fortiter punctatus, breviter flavo-pubescentis, pronoti lateribus, elytrorum fascia transversa antemediana recta parteque tertia apicali longius et densius pubescentibus, his partibus nonnunquam rufis, pronoto antico valde arcuato, postice lobo brevi, lato, rotundato praedito.

Long. 2-2.5 mm.

Hab. S. INDIA: Nilgiri Hills.

Numerous specimens of this were taken by Mr. H. I. Andrewes by sweeping in the Aughterlony Valley (3500–5000 ft.) in December, also by beating round small patches of jungle in hollows of open downs at Naduvatm (6000–6500 ft.). It is very like *O. jucundus*, but smaller, more oval, and more convex. The pattern and arrangement of the pubescence are the same, but the hairs are shorter and less uniform and lie closer together, the posthumeral band and apical patch of light hairs are more sharply defined, and the hairs occupying the remaining surface of the elytra much shorter and darker. The antennæ are light red, the last joint very large, flat, and completely circular in the male, and the preceding joint very small. In the female the penultimate joint is nearly half the diameter of the last. The last visible (fifth) ventral segment of the male is broadly depressed, and the hind margin armed with a spine on each side of the depression.

Orphinus minor, sp. n.

Fusco-niger, antennis pedibusque rufescentibus; ovatus, convexus, griseo-pubescentis, supra undique profunde sat grosse et crebro punctatus, pronoti lobo postico brevi, rotundato.
Long. 2 mm.

Hab. BOMBAY: Belgaum.

A number of specimens were taken by Mr. H. E. Andrewes, by whom it has been presented to the British Museum, together with the two preceding species. It was found in company with *O. jucundus* in sweeping grass at the end of the rains (November and December), but not nearly so plentifully as the other species.

It is like *O. affinis*, Reitt., without spots or bands of pigment or pubescence, and also without the reddish extremities of the elytra of that species. It is also smaller, less elongate, and more convex, with the prothorax relatively much longer and more rounded in front. The posterior lobe is shorter and more broadly rounded. The puncturation and clothing are almost exactly as in *O. affinis*.

Orphinus tabitha, sp. n.

Totus niger, sat nitidus, tarsi antennisque solum piceis; breviter ovatus, valde convexus, haud longe griseo-pubescentis, prothoracis lateribus, fasciis elytrorum tribus transversis suturaque anguste pilis longioribus et densioribus ornatis, fascia prima basali, secunda antemediana tertiaeque anteapicali, corpore supra profunde sat crebre punctato, pronoto postice valde lobato.
Long. 2.5–3 mm.

Hab. CEYLON: Kandy, Dikoya, 3800-4200 ft. (December 1881 to February 1882).

Five specimens collected by Mr. George Lewis seem to be all males. The terminal joint of the antenna is slightly ovate and not very large. The last visible (fifth) ventral segment has on each side of its posterior margin two sharp spines placed not far apart.

It is a black species, with the sides of the pronotum clothed with long and close grey hair, and three transverse nearly straight bands of similar hairs common to both elytra—the first band at the base, the second before and the third behind the middle. The middle band is nearer to the first than the third. The legs are black and the tarsi and antennæ alone red.

Orphinus junestus, sp. n.

Niger, antennis tarsisque flavidis; convexus, sat late ovatus, dorso subtiliter, extus crebre et rugose, punctulatus, undique haud dense griseo-setosus; pronoti lobo postico valido sat angusto. Long. 2 mm.

Hab. CEYLON: Dikoya, 3800-4200 ft. (Dec. 1881, Jan. 1882).

Two specimens were found by Mr. G. Lewis, one of each sex.

This is another small black species, with a close general resemblance to *O. athiops*. It is more convex and globular, finely but more closely and rugosely punctured. The lobe of the pronotum is stronger, rather narrow, and more rounded at the end. The antennæ are longer and the terminal joint of the male is smaller, but completely round. That of the female differs only in size.

Orphinus minimus, sp. n.

Niger, nitidus, subtiliter haud dense griseo-setosus, pronoto elytrorumque fasciis tribus integris fere rectis (prima marginali) capillis albidis longioribus sat sparsis ornatis, tarsis antennisque flavescens; parvus, ovatus, valde convexus, pronoto postice fortiter lobato, lobo fere truncato. Long. 1.5 mm.

Hab. N.W. AUSTRALIA: Roebuck Bay, Baudin Point, Parry I., Baudin I.

One specimen was taken in each locality by Commander J. J. Walker.

It is a very small species resembling *O. quornensis*, Blackb., *Ann. & Mag. N. Hist.* Ser. 8. Vol. xv. 30

but smaller, more regularly ovate, much more sparingly punctured and shining. The clothing is also much less close and the three transverse elytral bands are nearly straight and less defined, being composed of rather long but not numerous white hairs.

Genus HYPOCEUTHES.

This genus was formed by Gerstaecker for a single African species (*H. aterrimus*), but no generic characters of any value are attributed to it. It may be a denuded *Anthrenus* or possibly an *Orphinus*.

Genus CRYPTORRHOPALUM.

C. 7-signatum, Sharp, was figured (but apparently not described) by Lacordaire as *C. flavopictum* (Genera Col., Atlas, pl. xxiii. fig. 1).

The following species of the genus I believe to be new:—

Cryptorrhopalum eximium, sp. n.

Nigrum, pedibus fusco-rufis, ubique minute punctatum et sericeo-hirtum, capite pronotoque nitidis, elytris dense punctatis et vestitis, opacis, singulo maculis duobus magnis, flavis, rotundis ornato; breviter ovatum, parum convexum, clava antennali sat magna, brevi, rufa, articulis subæqualibus.

Long. 3 mm.

Hab. BRAZIL: Para.

A single specimen in the British Museum (from the Fry collection) was found by Mr. H. H. Smith.

It is a beautifully marked species, black, with a large round yellow patch at the base of each elytron, just reaching the anterior margin, and another of the same size and shape near the extremity, but not reaching the margins. The head and pronotum are shining, very finely but not closely punctured and pubescent, and the elytra are very densely punctured and clothed and entirely opaque.

Cryptorrhopalum felis, sp. n.

Fuscum, griseo-vestitum, pedibus rufis; ovale, subglobosum, undique crebre punctatum et sat longe capillatum, pronoto, elytrorumque basi, medio et apicibus capillis longioribus et densioribus vestitis, pronoti lobo postico truncato, bipenicillato, clava antennali sub-orbiculari, articulo ultimo quam primo paulo minori.

Long. 2-3 mm.

Hab. S. BRAZIL: Rio de Janeiro (*A. Fry*), Bahia (*Reed*).

This is a very convex, subglobular insect, densely sculptured and clothed above with rather long and coarse ashy-grey hair. The clothing is long and shaggy upon the pronotum, and its posterior lobe, which is truncated, has two backward-pointing brushes or tufts. Upon the elytra the hairs are longer and closer at the front margin, the apex, and the middle. At the latter part they form a transverse bar, widest at the suture, and tapering at each end without reaching the sides.

Cryptorrhopalum scutellare, sp. n.

Rufum, aequaliter minute punctatum et flavo-sericeum; parvum, breviter ovatum, convexum, pronoti lobo postico valido, recte truncato; scutello nudo, nitido, impunctato; antennarum clava brevi, articulis duobus fere aequalibus.

Long. 2 mm.

Hab. W. INDIES: Mustique I. (Grenadines).

Two specimens were obtained by Mr. H. H. Smith.

A minute insect, regularly oval in shape and very convex, closely and uniformly clothed with minute decumbent greyish or yellowish-grey silky hairs, but with the scutellum free from hair and punctures and very shining. The posterior lobe of the pronotum is squarely truncated, and is also smooth and shining at its extremity, and the hairs at its base are divided, so as to present the appearance of two tufts.

ANTHRENO CERUS, gen. nov.

Corpus compactum, setosum, haud squamosum. Pedes graciles.

Prosternum antice productum ad capitis receptionem, postice angustum, mesosternum toto bisectans, lateraliter profunde excavatum ad antennarum receptionem. Antennæ crassæ, stipite brevi, articulis valde transversis, compactis, clava 3-articulata, magna, cylindrica, articulo primo et tertio longitudine fere ad latitudinem æquali, secundo transverso.

Type, *Anthrenus australis*, Hope.

This genus is intermediate between *Trogoderma* and *Anthrenus*, the antennæ being of the short massive type characterizing the latter, and the large, compact, three-jointed club exactly fitting a deep sharply defined cavity provided for it in the anterior half of the side of the prosternum. All the joints fit very closely together, the foot-stalk is short, the club long, abrupt, and of nearly equal width throughout. The head fits closely against the prosternal plate, but is less deeply sunk in the prothorax than in *Anthrenus* in the

position of rest, and the anterior legs are not closely fitted together. The clothing consists of short setæ and not broad scales.

So far as is known, the genus is confined to Australia. It includes the five species grouped by Blackburn (Trans. Roy. Soc. S. Austr. xxvii. 1903, p. 169) as "aberrant *Cryptorhopala*" (*C. australe*, Hope, *confertum*, Reitt., *variabile*, Reitt., *quadrifasciatum*, Blackb., and *terzonatum*, Blackb.). The first, of which I have examined the type in the Oxford Museum, I believe to be the species later described as *Trogoderma riguum*, Er. Two other species are added here:—

Anthrenocerus bicolor, sp. n.

Niger, elytris pedibusque ferrugineis, corpore supra fulvo-pubescenti, setis longioribus albidis variegato, subtus minute sat crebre albo-vestito; ovatus, pronoto brevi, subnitido, postice fortiter lobato, lobo dense, marginibus anticis et lateralibus minus dense albo-setosis; elytris crebre punctatis, irregulariter quadrifasciatis, fascia prima marginali, apicibusque albo-setosis.
Long. 2.5 mm.

Hab. N.W. AUSTRALIA: Adelaide R., Roebuck Bay (*J. J. Walker*).

This has a close similarity to *A. australis*, Hope, but is easily distinguished by its reddish elytra, in addition to which the bands of white hairs are more irregular.

Anthrenocerus pulchellus, sp. n.

Ferrugineus, setis decumbentibus brevibus flavis et albis intermixtis variegatus, corpore subtus nigro, subtiliter sat crebre albo-vestito; anguste ovatus, convexus, prothorace antrorsum valde angustato, postice fortiter lobato, lobo partibusque anticis et lateralibus griseo-setosis; elytris irregulariter trifasciatis, fascia antice ad suturam late interrupta, ad basin producta, apicibus etiam setosis.
Long. 2 mm.

Hab. N.W. AUSTRALIA: Baudin Point, Baudin I.

This, as well as the last species, was taken by Commander J. J. Walker. It is a smaller and narrower insect than *A. bicolor*, and the clothing of the upper surface consists of shorter and more close-lying, rather scaly hairs, yellow and white mixed, disposed as in *A. bicolor*, but in rather larger and better-defined patches.

Genus ANTURENUS.

Anthrenus varius, F., was described in Ent. Syst. i. p. 264. The reference given in both Gemminger and Harold's and Dalla Torre's Catalogues (Syst. Ent. p. 60) is to *Byrrhus varius*, F., an entirely different insect, now known as *Cytilus sericeus*, Forst.

A. vorax, Wat., is synonymous with *A. fasciatus*, Herbst, which has a very wide range.

A. lepidus, Léc., and *occidens*, Casey, seem to me to be varieties of the protean and almost universal species *A. pimpinella*, F.

Reitter's type of *A. subclaviger* is apparently the female. Besides specimens from his locality (Ad-n), we have specimens from Calcutta (taken in the Museum compound). The species has been sent also from the N.W. Himalayas (taken in flowers of *Castanea vesca*) and the Punjab. In the males the antennæ are longer than in the females and the club consists of two joints only instead of three.

Anthrenus (subgen. *Florilinus*) *sinensis*, sp. n.

Brunneus, squamis breviter triangularibus vestitus, ventralibus griseis, dorsalibus brunneis et griseis, pronoti basi ab his toto tecto, elytrorum fasciis duabus fere rectis maculaque apicali, antennis 7-articulatis, clava solida, gracili, maris quam articulis præcedentibus multo longiori.

Long. 2.5-3 mm.

Hab. N. CHINA: Tientsin (*F. M. Thomson*).

A long series of specimens received from Mr. Thomson show constant differences from *A. musæorum*, L., to which it is exceedingly close. It is rather narrower in shape and the average size is a little smaller. The scales are of the same short triangular form, but a little longer in *A. sinensis*, and those forming the background are not black but a dull brown. The pale patches of scales at the sides of the pronotum, which are separated in *A. musæorum* by a well-marked interval, unite in *A. siamensis* upon the basal lobe, and the fasciæ of the elytra are less irregular in outline. The antenna consists of seven joints, the first two globular, followed in the male by four equal minute transverse joints and a slender fusiform solid club considerably longer than all the rest together; in the female, by two small but slightly elongate joints, two progressively longer, dilating towards the extremity, and a club-joint about as long as the three preceding ones together.

Anthrenus subsetosus, sp. n.

Brunneus, corpore subtus nigro, pedibus antennisque rufis, subtus griseo-, supra flavo-squamoso, hic squamis rufis et fuscis variegato, squamis longissimis; pronoti angulis posticis, lobo postico annulaque discali pallido-squamosis, squamis reliquis obscuris; elytrorum fascia communi post-humerali annulaque subapicali utrinque pallide squamosis; corpore lato ovato, prothorace haud lato, antice paulo producto; antennis 11-articulatis, clava 3-articulata. Long. 3 mm.

Hab. UPPER BURMA (*Gray*).

This closely resembles *A. verbasci*, L., but is rather more elongate and has much longer and narrower scales, those upon the pronotum being scarcely distinguishable from hairs. The lower surface is black, not very densely clothed with fine white setæ, and the upper surface brown, with its scales varying from pale yellow to dark brown, but with every gradation, the pattern resulting being therefore without strong contrasts. The scales, moreover, are not closely fitted together and immovable, but form a rather loose shaggy clothing.

A series of specimens were received by Mr. H. E. Andrewes, by whom several have been presented to the British Museum.

Anthrenus seminulum, sp. n.

Globosus, brevissimus, fuscus, squamis magnis latis dense vestitus, inferis albidis, superis fulvis albidis et bruneis, elytrorum macula magna subrotundata, postica fusca, a medio fere ad apicem extensa; antennis brevissimis, 11-articulatis, clava 3-articulata, breviter pyriformi, articulo ultimo maximo. Long. 2.5 mm.

Hab. S. RHODESIA: Salisbury.

Two specimens of this very distinct species were found by Mr. G. A. K. Marshall in August 1900. I believe them to be male and female, the antennal club of one being slightly larger than that of the other. It is a very short, broad, and globular insect, covered with large nearly round scales, which are whitish beneath the body and at the sides of the pronotum, various shades of yellow and brown intermixed upon the general surface, with a large nearly round patch of dark brown scales upon the posterior half of the elytra. The pronotum is short, evenly convex, and furnished with a strong, pointed, triangular lobe behind, entirely covering the scutellum. The elytra are slightly flattened upon the dark

posterior area, and each has a rather sharp prominence just before the apex. The antennæ are exceedingly short and closely articulated, with a three-jointed pear-shaped club, of which the first joint is small, the second rather large, and the last very large, forming more than half the club.

Anthrenus globiger, sp. n.

Rotundus, toto niger, dense punctatus et squamosus, squamis inforis albis, superis nigris, pronoti lateribus, maculisque elytrorum punctiformibus 13 circiter albis; antennis brevissimis, 8-articulatis, articulo ultimo magno, hemisphærico.

Long. 2·5 mm.

Hab. INDIA: Calcutta.

Two specimens in the British Museum formed part of the Bowring Collection. One of them is labelled "India" and the other (perhaps wrongly) "China." A specimen in the Calcutta Museum was found by Mr. F. H. Gravely upon the Museum premises.

The sharply defined black and white scaling is very distinctive, and, judging from the identical aspect of the three specimens before me (taken at an interval of more than half a century), the species is not subject to the extreme variability prevailing in other *Anthreni*.

The sides of the pronotum are broadly white, the white scales extending a short distance round the base. Upon the black median area there is a central white spot, two upon the posterior lobe, and several at the front margin. Upon the elytra there is a common white spot just behind the thoracic lobe, and upon each a small anterior spot near the lobe, one behind the shoulder, two at the outer margin behind the middle, and two near the sutural margin behind the middle. The antennæ are very short, consisting of eight joints, all but the terminal one transverse, and this circular in shape, with its diameter not quite as long as the foot-stalk, and hemispherical in shape, with its convex face beneath and the flat upper surface alone exposed in the retracted position.

Anthrenus megalops, sp. n.

Elongatus, flavus, nitidus, squamis breviter triangularibus brunneis, fulvis et albis tectus, pronoti lateribus elytrorumque plagis vagis tribus albis, prima antemediana, aliis postmedianis, antennis 9-articulatis, clava biarticulata, articulo ultimo quam tribus præcedentibus paulo longiori.

Long. 3·5 mm.

Hab. ABYSSINIA (*A. Raffray*).

This and the following species are of an elongate form quite peculiar in the genus, the length of the elytra being twice their conjoint width. *A. megalops* is yellow in colour and clothed with short, moderately large scales, abruptly truncated at their free end. They are chiefly buff-coloured, with three ill-defined transverse patches of white scales, the first before the middle and widely separated from the other two, which are considerably behind the middle. Amongst the lighter scales, and especially between the two posterior white bands and before the apex, there are scales of a dark brown colour. The antenna is composed of nine joints, the first two globular, the third similar but minute, the fourth and fifth slightly elongate, the sixth like the third, the seventh larger, short, and flattened, the eighth transverse and closely articulated to the terminal joint, which is rather longer than the three preceding together.

Anthrenus longus, sp. n.

Rufo-brunneus, supra opacus, elongatus, dense punctatus, squamis breviter ovatis, magnis sat dense tectus, squamis plerumque brunneis sed pronoti lateribus, elytrorum macula angulata post-scutellari, fascia transversa postmediana apicibusque pallidis; antennis 9-articulatis, clava uniarticulata, pyriformi, longitudine ad sex præcedentes conjunctim æquali.
Long. 4.5 mm.; lat. max. 2 mm.

Hab. E. SOCOTRA: Homhil, 1500-3000 ft. (*W. R. Ogilvie-Grant*).

This has the same elongate shape as the last, but is rather larger. The pattern is similar but the colour darker and the upper surface is not shining, being closely covered with large shallow pits, from which the scales arise. The latter are larger and nearly round. The eyes are not large and are separated by a space equal to their combined diameters, and the ocellus is small but prominent. The antennæ consist of nine joints, the first two globular, the third slightly elongate, the fourth to eighth minute, round and similar, and the ninth pear-shaped and equal in length to the six preceding.

Anthrenus frater, sp. n.

Oblongus, niger, squamis minutis angustis setiformibus nigris et albis dense tectus, pronoto subrectangulari, lateribus paulo explanatis, antice transversim elevato; antennis 11-articulatis, articulis omnibus transversis, tribus ultimis clavam abruptam fere rectangularem constituentibus.
Long. 2.5-3 mm.

Hab. TASMANIA.

This is very closely related to *A. ocellifer*, Blackb., with which alone it shares the peculiar oblong form, anteriorly elevated pronotum, and abruptly clubbed 11-jointed antennæ. It differs, however, in its more elongate outline and much smaller and more setiform scales. The pattern formed by these is very variable but like that of *A. ocellifer*. The front and hind margins of the pronotum are clothed with light scales, and these also form upon the elytra an anterior ring, an irregular median band and a posterior ring. These markings may become split up into small scattered patches, and brown scales may appear in addition to the black and white ones.

Genus APSECTUS.

Trinodes mexicanus, Reitter, is probably *Apsectus hystricæ*, Sharp, described twenty-two years later, and in that case will become *Apsectus mexicanus*, Reitt.

This genus, which differs from *Trinodes* in not having the mesosternum channelled for the reception of a narrow prosternal process (which process is therefore also absent), is not confined to the Western Hemisphere, as might be supposed from the Catalogue. It is probable that numerous Oriental species exist. One at least of those at present referred to *Trinodes* must be transferred to it. This is *T. hirtellus*, Walker, in which the prosternum is very short and excised behind and the mesosternum entire and rounded in front to fit the prosternum.

Closely allied Oriental forms are the following, while another from Australia is yet undescribed:—

Apsectus iota, sp. n.

Parvus, late ovatus, pronoto haud angusto; prosterno rectangulari, postice recto truncato, mesosterno lato, antice fere recte truncato; antennis gracilibus (? maris), clava fusiformi, bi-articulata, articulo penultimo transverso, ultimo ovali, quam precedenti quadruplice longiori.

Long. 1.5 mm.

Hab. TENIMBER IS.: Larat.

Three specimens were taken by Mr. F. Muir amongst an important collection of Coleoptera from this small Malayan island.

It is a species exceedingly like *T. hirtellus*, Walker, in size and general appearance, but rather more broadly oval, the pronotum especially being less narrowed. In the relation of the parts of the sternum it is also similar. As in *A. hirtellus*, the antenna (of the presumed male) ends with a large

elongate-oval joint, preceded by three transverse joints, but in the new species these three are much more distinctly articulated, and the last of them is enlarged almost to the diameter of the terminal joint and about a fourth of its length. About a dozen specimens of these two species which I have examined seem to be all of the same sex.

Apsectus indicus, sp. n.

Niger, nitidus, sat longo griseo-setosus, pedibus antennisque pallide flavis, harum clava biarticulata, brunnea; breviter ovatus, pronoto lato, lateribus antice valde contractis, postice late lobato, lobo truncato, antennarum clava haud compacta, articulo penultimo transverse ovali, ultimo paulo elongato, vix triplice majori.

Long. 1.5 mm.

Hab. BOMBAY: Belgaum (*H. E. Andrewes*).

This species has the closest resemblance to *A. hirtellus*, but the prothorax is rather more narrowed in front and its anterior margin has a pale semitransparent appearance. The lateral carinae slightly approach the lateral margins behind instead of diverging from them, and are therefore nearer the hind angles. The club of the antenna is quite different. The terminal joint is large, but oval, and still less elongate than in *A. iota*, the ninth and tenth (penultimate) joints are as in that species, the eighth not longer than it is wide.

Genus TRINODES.

Trinodes punctipennis and *globosus* of Macleay must be removed from the Dermestidæ to the Byrrhidæ. The former, of which Mr. Lea has sent me specimens compared with the type, proves to belong to the genus *Byrrhinus*, and the other must be supposed to be allied to it until evidence is found to the contrary. The fragmentary description is practically worthless.

Trinodes flavus, Motsch., Egypt (Bull. Soc. Nat. Mosc. xxxvi. 1863, ii. p. 433), has been omitted from all the catalogues. Its description is not really worthy of that name, but in the absence of any authoritative definition as to what constitutes a description the name can scarcely be ignored.

The description of *T. cinereohirtus*, Motsch., from Ceylon, although of much greater length, seems to contain scarcely more information of real significance. The species from Ceylon here described, although of the same size, is not suggested by anything else in that description. The phrase

“thorace valde transverso, densissime cinereo-villoso” seems to preclude the possibility of identity, and the elytra are not subattenuate at the apex.

Trinodes emarginatus, sp. n.

Obscure rufus, longissime fulvo-hirsutus, capite prothoracequo nigrescentibus; regulariter ovatus, prothorace antice attenuato, haud brevi, postice valde lobato, lobo distincte exciso, processu prosternali valido, triangulari, antennis gracilibus, clava laxè triarticulata, articulo ultimo sat grandi, longo ovali, maris quam precedenti quadruplice majori.

Long. 2 mm.

Hab. CEYLON: Kandy (*G. E. Bryant*, July 1908).

It has a close similarity to the European *T. hirtus*, but the hairy clothing is much longer, less abundant, and of a tawny colour. The elytra are much lighter in colour than the head and pronotum, and the posterior lobe of the latter is rather deeply excised. The antennæ are very slender, with a club of similar shape, the last joint in the male being about four times the length of its predecessor.

Trinodes rotundus, sp. n.

Niger, nitidus, sat late ovatus, globulus, ciliis griseis tenuibus haud dense vestitus; pronoto lato, brevi, marginibus lateralibus integris angustis; antennarum clava laxè moniliformi, articulis tribus globiformibus, ultimo cæterum magnitudine duplici.

Long. 2·3 mm.

Hab. S.E. BORNEO: Martapura (*Doherty*, 1891).

This is a large species of the same size as *T. rufescens*, Reitt., and more regularly oval and less contracted in front than any other species known to me, the pronotum being broad and rounded and the shoulders not prominent. The hairy clothing is less coarse and more scanty than in *T. hirtus* and *rufescens*, and consists of intermixed erect and prostrate hairs. The lateral margins of the pronotum are narrow, and the grooves entire and parallel to the sides. The club of the antenna consists of three very loosely connected globular joints, the last twice the diameter of either of the others. The structure of the sternum is really intermediate between the two extremes represented by typical forms of *Trinodes* and *Aspectus*. The prosternum has a posterior process, but this is very short and blunt, scarcely reaching beyond the front coxæ. Its tip enters a slight cavity in the mesosternum, but does not divide the latter as in the other species.

The three specimens are probably females.